

**In the Abstract:**

Please replace the Abstract with the Substitute Abstract enclosed herewith. A marked-up version of the Substitute Abstract is also enclosed herewith.

**In the Claims:**

Please **AMEND** claims 1, 4, 8, 12, 15 and 18 as follows:

Sub C 1  
A  
1. (Twice Amended) A method for assuring compatibility between a formal specification, a front-end debugger program, and a back-end debugger program which interfaces with a debuggee system, the method comprising:  
    inputting a formal specification into a code generator;  
    parsing the formal specification;  
    generating a front-end debugger program portion from the formal specification;  
    generating a back-end debugger program portion from the formal specification; and  
    wherein the front-end debugger program and back-end debugger program are compatible with each other.

Sub C 2  
A  
4. (Once Amended) The method of Claim 2, wherein the back-end debugger program directly controls and communicates with a second virtual machine.

Sub C 3  
A  
8. (Twice Amended) The method of Claim 1 further comprising enabling a communication protocol between the front-end debugger program and the back-end debugger program, wherein the communication protocol is defined by the formal specification.

Sub C 4  
A  
12. (Twice Amended) A method for automatically generating front-end debugger interface code and back-end debugger agent interface code that are both compatible with a communication protocol, the method comprising:

sub C 7  
creating a formal specification file that contains a description of a communication protocol between a front-end debugger code and a back-end debugger agent code;

inputting the formal specification file into a code generator;

utilizing the code generator to parse the formal specification;

generating the front-end debugger interface code from the formal specification;

generating the back-end debugger agent interface code from the formal specification; and

wherein the front-end debugger interface code and the back-end debugger agent interface code are compatible with each other.

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15. (Twice Amended) A computer readable medium including computer program code for automatically generating front-end debugger interface code and back-end debugger interface code that are both compatible with a communication protocol, the computer readable medium comprising:

computer program code for inputting a formal protocol specification into a code generator;

computer program code for utilizing the code generator to parse the formal protocol specification;

computer code for generating front-end debugger interface computer code from the formal specification;

computer code for generating back-end debugger interface computer code from the formal specification; and

wherein the front-end debugger interface computer code and back-end debugger interface computer code are compatible with each other.

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18. (Once Amended) A computer system for automatically generating front-end debugger interface code and back-end debugger interface code that are both compatible with a communication protocol, the computer system comprising:

a processor; and

a computer program operating on the processor that reads in a formal communication protocol specification, parses the specification, and generates front-end debugger interface code and back-end debugger interface code, such that the

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front-end debugger interface code and the back-end debugger interface code are  
fully compliant with the specification and compatible with each other.

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